

## **IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A process for extracting  $\beta$ -amylase from ungerminated cereal selected from the group consisting of barley, wheat, rye and soya, comprising providing cereal in an aqueous medium and extracting said cereal in the presence of a cellulase enzyme preparation having at least cellulase, hemicellulase and  $\beta$ -glucanase activities in said aqueous medium to obtain an extract containing  $\beta$ -amylase, followed by recovering said  $\beta$ -amylase from said medium in purified form.

2. (Cancelled)

3. (Currently amended) The process according to claim [[2]]1, wherein said cereal is barley or wheat.

4. (Original) The process according to claim 1, wherein said cereal comprises grains of said cereal and wherein said grains are pretreated by a process selected from removal of husk, bran, starch or gluten, milling, grinding, polishing and combinations thereof.

5. (Original) The process according to claim 4, wherein said cereal comprises husked barley.

6. (Original) The process according to claim 5, wherein said barley comprises grains husked so that the actual husk has been removed but the endosperm is left substantially intact.

7. (Original) The process according to claim 6, wherein no more than 20% of the weight of an unhusked grain has been removed in said husking.

8. (Original) The process according to claim 1, wherein said extraction is carried out in reducing conditions.

9. (Original) The process according to claim 8, wherein said reducing conditions are adapted to provide a reducing activity capable of releasing the  $\beta$ -amylase bound to the structural protein of the grain.

10. (Original) The process according to claim 9, wherein said reducing conditions are provided by water containing SO<sub>2</sub>.

11. (Original) The process according to claim 5, wherein said husked barley is extracted with water containing SO<sub>2</sub> in a ratio of 5:8 to 2:3.

12. (Original) The process according to any claim 1, wherein said extraction is carried out at a temperature of 25 to 35 °C.

13. (Original) The process according to claim 11, wherein said temperature is 29 to 31 °C.

14. (Original) The process according to claim 1, wherein the extraction time of said extraction is 48 to 66 hours.

15. (Original) The process according to claim 14, wherein said extraction time is 55 to 62 hours.

16. (Cancelled)

17. (Original) The process according to claim 1, wherein said cellulase enzyme preparation is added to said aqueous medium at a dosage of at least 0.015% of the weight of said cereal.

18. (Previously Presented) The process according to claim 1, wherein said cellulase enzyme preparation is added to said aqueous medium at a dosage corresponding to an enzyme activity selected from at least 1050 U of DNS-CMC cellulase per kilogram of cereal, at least 900

U of  $\beta$ -glucanase per kilogram of cereal, at least 285 U of DNA-xylanase per kilogram of cereal and combinations thereof.

19. (Original) The process according to claim 1, wherein said cellulase comprises cellulase of a mold.

20. (Original) The process according to claim 18, wherein said cellulase comprises cellulase of the genera selected the group consisting *Humicola*, *Fusarium*, *Myceliophthora*, *Aspergillus*, *Penicillium*, *Trichoderma* and combinations thereof.

21. (Original) The process according to claim 19, wherein said cellulase is cellulase of *Trichoderma* mold.

22. (Original) The process according to claim 1, wherein said cereal is used also for producing starch.

23. (Original) The process according to claim 22, wherein said  $\beta$ -amylase is extracted from said cereal before starch is separated from said cereal.

24. (Original) The process according to claim 22, wherein said  $\beta$ -amylase is extracted from said cereal after separation of starch from said cereal.

25. (New) The process according to claim 1, wherein said presence of the cellulase enzyme preparation increases the yield of  $\beta$ -amylase obtainable from said cereal.

26. (New) The process according to claim 25, wherein the yield of  $\beta$ -amylase is between about 10 and 15% units higher than without said cellulase enzyme preparation.

27. (New) The process according to claim 1, wherein said  $\beta$ -amylase is removed from said medium in purified and concentrated form by pressure filtration and ultra filtration.

28. (New) A process for extracting  $\beta$ -amylase from barley, comprising the steps of
- a) providing an aqueous medium containing grains of barley in ungerminated form;
  - b) providing a cellulase enzyme preparation having at least cellulase, hemicellulase and  $\beta$ -glucanase activities in said aqueous medium;
  - c) causing  $\beta$ -amylase to be extracted from said grains to provide an aqueous extract containing  $\beta$ -amylase;
  - d) recovering  $\beta$ -amylase in purified form from said aqueous extract; and
  - e) optionally subjecting said recovered  $\beta$ -amylase to further processing selected from purification, concentration and combination thereof.

29. (New) The process according to claim 28, wherein the  $\beta$ -amylase yield is as much as 65% of the total amount of  $\beta$ -amylase in said barley.